Attachment A
Version with markings to show changes made.

1. (Amended) A thermal treatment system, comprising:

a heat applying element for generating a thermal dose used to ablate a target mass in a patient;

a controller for controlling thermal dose properties of the heat applying element;

an imager for providing preliminary images of the target mass;

a planner for automatically constructing a treatment plan, comprising a series of treatment sites that are each represented by a set of thermal dose properties;

wherein the planner automatically constructs the treatment plan based on input information including one or more of:

a volume of the target mass,

a distance from a skin surface of the patient to the target mass,

a set of default thermal dose prediction properties,

a set of user specified thermal dose prediction properties,

physical properties of the heat applying elements, and

images provided by the imager.

4. (Amended) The treatment system of claim [3]1, wherein the default thermal dose prediction properties are based on a type of clinical application and include at least one of:

thermal dose threshold,

thermal dose prediction algorithm,

maximum allowed energy for each thermal dose,

thermal dose duration for each treatment site,

cooling time between thermal doses, and

electrical properties for the heat applying element.

5. (Amended) The treatment system of claim [3]1, wherein the user specified thermal close prediction properties include at least one of

overrides for any default thermal dose prediction properties,

treatment site grid density, and

thermal dose prediction properties not specified as default thermal dose prediction properties from the group comprised of thermal dose threshold, thermal dose prediction algorithm, maximum allowed energy for each thermal dose. thermal dose duration for each treatment site cooling time between thermal doses, and electrical properties for the heat applying element.

15. (Amended) A focused ultrasound system, comprising:

a transducer for generating ultrasound energy that results in thermal doses to ablate a target mass in a patient;

an imager for providing preliminary images of the target, and for providing thermal images illustrating an actual thermal dose distribution in the patient; and

a planner for automatically constructing a treatment plan using the preliminary images, the treatment plan comprising a series of treatment sites represented by a set of thermal dose properties used by the controller to control the transducer;

wherein the planner further constructs a predicted thermal dose distribution illustrating the predicted thermal dose contours of each treatment site in the treatment plan;

wherein after a thermal dose is delivered to each treatment site in the treatment plan, the actual thermal dose distribution is compared to the predicted thermal dose distribution to determine remaining untreated locations within the target mass.

18. (Amended) The focused ultrasound system of claim [16]15, wherein after a thermal dose is delivered to a treatment site in the treatment plan, the actual thermal dose distribution is compared to the predicted thermal dose distribution to determine changes to the dosing parameters in neighboring sonication sites.

19. (Amended) The focused ultrasound system of claim [17]15, wherein the planner automatically evaluates the treatment plan based on the remaining untreated locations and updates the treatment plan to ensure complete ablation of the target mass is achieved by one or more of adding treatment sites, removing treatment sites, modifying existing treatment sites, or leaving the treatment plan unchanged.

20. (Amended) The focused ultrasound system of claim [17]15, wherein a user can manually adjust the treatment plan based on the remaining untreated locations.

21. (Amended) The focused ultrasound system of claim [17]15, wherein the preliminary images and the thermal images represent three-dimensional data.

22. (Amended) The focused ultrasound system of claim [17]15, wherein the predicted thermal dose distribution and actual thermal dose distribution represent three-dimensional data.

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